

A Study on Knowledge Level of Rain Maize Growers in Jammu District of Jammu and Kashmir State*

Dryland farming is the prominent feature of Indian Agriculture with 70.00 per cent of the net cropped area in the country depending on natural rain. Maize, which is mostly grown as a rainfed crop in the country, is of special importance in hilly and submountainous regions of Jammu and Kashmir state, where it forms staple food of the people. It occupies 205.42 thousand hectares constituting 55.10 per cent of the total cultivated area of the state. In spite of the fact that maize occupies a major area during kharif season, the average yield is as low as 18.25 quintals / hectare.

The maize production in this area can be achieved through adoption of only improved dry land farming practices, which can be made possible only when farmers have perfect knowledge about dryland farming practices. Knowledge is a pre-requisite to do anything. Lack or insufficient knowledge about any idea prevents an individual to avail its benefits.' Perfect knowledge about an idea and practice helps an individual to relate it to his needs in terms of profitability and productivity. So, the basic input for achieving higher yields is assimilation of technical knowledge for which the first step is getting the knowledge. Against this background, the present research study was conducted to study the knowledge level of maize growing farmers with respect to recommended rainfed maize cultivation practices and to analyze the personal and socio-economic characteristics of maize growers in relation to their knowledge level.

The study was conducted in Akhnoor tehsil of Jammu district in Jammu and Kashmir during 1998-99. Taking area under maize as the criterion, top six villages of the tehsil were selected. By following random sampling procedure, 25 maize growers were selected from each village, making the total sample size of 150 maize growers.

A 'teacher made test' was employed for the measurement of farmers knowledge regarding recommended cultivation practices of maize. On the basis of the package of practices followed, a set of 29 knowledge questions was prepared. The correct response was given a score of one and incorrect response was given a score of zero. The total knowledge score indicating his level of knowledge about recommended cultivation practices was calculated by summing up the number of items correctly answered by an individual respondent (Hanumanaikar, 1995). The independent variables used to know the association with the knowledge level of maize growers were age, education, land holding, annual income and mass media exposure. The data were collected by personal interview method and analyzed using percentage, frequency and zero order correlation.

It was observed that majority (70.0%) of the maize growers had 'medium' level of knowledge followed by high (16.0%) and low (14.0%) (Table 1). These maize growers might not have been exposed to the improved technology and as a result, only less per cent of them possessed high knowledge with regard to improved practices. Also majority of the respondents possessed radio (82.60%) and Television (62.0%). These mass media might have helped the respondents to gain some knowledge on agricultural practices. Hence, majority of the respondents were found to have medium knowledge level.

The relationship between knowledge and personal and socio-economic characteristics of the maize growers has been presented in table 2. As the data indicates education and mass media exposure had positive and significant relationship with the knowledge level of maize growers.

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Table 1. Overall knowledge of maize growers about improved cultivation practices of rain fed maize

Knowledge	Respondent		Mean knowledge score	X Yield
	Number	Per cent		
Low ($<\bar{X}-1$ S.D)= 8.63	21	14	7.28	4.42
Medium ($\bar{X}+1$ S.D) = Between 8.63 & 14.77	105	70	11.33	6.19
High ($< X+ 1$ S.D) => 14.77	24	16	16.91	7.12
X-11.70	S.D. = 3.07	X-11.70		

Education was positively significant in its relationship with knowledge level of rainfed maize growers. It is a known fact that education is the basic requirement which widens the horizon of knowledge of an individual to expose himself to the various media and sources. Formal education of the respondents might have helped them to a greater extent to understand the importance of recommended improved cultivation practices of maize.

There was positive and significant relationship between knowledge level of maize growers about recommended cultivation practices of rain fed maize and their extent of exposure to

mass media. It is logical to expect that educated farmers with more exposure to mass media will acquire more knowledge about improved cultivation practices through the media.

It can be inferred from the above findings that though enough dry farming technologies have been evolved, farmers are not fully aware of these technologies. It also can be inferred that there is a considerable scope for increasing knowledge of farmers about these important practices. So, there is a need to step up extension efforts to make farmers aware of the latest technologies through extension activities to the fullest extent which in turn helps for greater adoption.

Table 2. Relationship between the independent variables and knowledge level of the respondents

Independent variables	Correlation value 'r'
Age	0.053 N.S.
Land holding	0.041 N.S.
Annual income	0.1041 N.S.
Education	0.298**
Mass media exposure	0.334**
N.S. - Non- Significant * Significant at 1 % per cent level	

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